The Management of Information and Technology in Fairfax County, Virginia

David J. Molchany
Chairman Executive Committee
Council on Technology Services

CIO, Fairfax County Government

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Creating the CIO Organization

In FY1994 the Fairfax County Board of Supervisors created a citizens Information Technology Advisory Group (ITAG) to study the use and management of Information Technology (IT) by the County government. The ITAG was composed of eight private sector executives from Fairfax County based companies. Two committees supported the ITAG, one made up of staff from their own corporate organizations and the other comprised of County Staff.

The work of the ITAG resulted in the creation of the Department of Information Technology (DIT). Combining separate County organizations that dealt with programming, infrastructure, operations, telecommunications, Geographic Information Systems (GIS), mapping and technical training created the department. The new DIT also included centralized resources for system security, standards, technology planning and administration.

The ITAG further recommended that:

- The County create a Chief Information Officer (CIO) position to oversee DIT and technology Countywide
- The CIO is a direct report to the County Executive as a Deputy County Executive level position.
- IT be treated as an investment and given consistent funding annually
- The CIO be responsible for IT planning County-wide and the expenditure of major IT project funds
- The County create a funding mechanism to ensure IT employees are trained properly and their skills are kept up to date
- An annual IT plan is written to detail IT direction, projects and budgets.

The Fairfax County IT Plan can be accessed at:

- **http://www.co.fairfax.va.us/gov/dit/itplan.htm**

ITAG also recognized that larger County departments would still need to retain some IT staff to augment the central DIT staff. The departmental staff typically provides end user support and administration of small departmental systems. In some cases they also provide an IT planning function. IT staff in the departments has been kept at a minimum and these staff members matrix to the central IT department for all standards, planning and budgets.

The initial ITAG recommendations have resulted over time in:

- centralization of the major IT functions for the County (FY1995)
- creation of a CIO function (FY1995)
- creation of a permanent private sector advisory group (FY1998)
- creation of an internal senior management IT steering committee (FY1999)
- standardization of technology investments across the County (FY1995)
- creation of a technology modernization fund (FY1996)
- annual technology project review as part of the budget process (FY1995)
- funding for technology training (FY1996)
- project steering committees, formal project reporting and governance (FY1996)
- project manager certification (FY1999)

The Role of the CIO

The Board of Supervisors has broadened the role of the CIO since the position was created in FY1995. Not only is the CIO responsible for the Department of Information Technology, the CIO is now responsible for a broad range of information related departments. The Fairfax County Library System, County-wide HIPAA compliance function, Cable Television Franchise Management, Cable Television Productions, Consumer Protection and Document Services groups report directly to the CIO. The CIO's direct responsibility for information spans books, television, technology, consumer protection and the management of documents. Nearly 1200 staff report to the CIO at Fairfax County, the CIO group budget is over $100 million dollars.

To assist the CIO the Board of Supervisors in FY1998 created a permanent private sector group called the Information Technology Policy Advisory Committee (ITPAC). The group is made up of 10 members appointed directly by the Board of Supervisors and five members that are recommended to the Board by the Federation of Civic Associations, School Board, Northern Virginia Technology Council, League of Women Voters and the Chamber of Commerce respectively.

The ITPAC meets monthly to review the County's technology projects, plans and direction and endorses the annual technology spending plan to the Board of Supervisors during budget review and deliberations. The ITPAC serves as the board of directors to the CIO, providing advice, experience and support for the IT program.

In FY1999 an internal County group, the Senior IT Steering Committee was added to assist and advise the CIO. This group includes the County Executive, Chief Financial Officer, Deputy County Executives and representatives from the largest County Departments. This group meets monthly to look at specific IT initiatives, opportunities and issues, sets the County's IT strategy based on the Board of Supervisors' direction, and approves the annual IT investment plan which is delivered by the CIO to the ITPAC for its endorsement.

Project Prioritization and Execution

The Senior IT Steering Committee sets the funding priorities for technology projects. These priorities state that projects must provide one or more of the following benefits:

- Convenient access to information and services
- A high level of responsiveness to customer requirements
- Management of County information assets
- Management of County technology assets
- Management of County human resource assets

The Senior IT Steering Committee also ensures that the CIO hears the opinions of the individual departments concerning IT plans, issues and decisions.

When ITAG recommended the technology modernization fund, it recommended funding of approximately $20 million per year. This fund provides money for the software, hardware and services included in the County's major IT projects. The modernization fund represents the County's enterprise wide projects, which are closely tied to its strategic goals. Today the dollar amount associated with the fund varies each year and is determined through an IT project portfolio management process. The process reviews the business benefit; cost and technical viability for each potential IT investment before a portfolio of approved projects are selected for a given fiscal year.

The initial project recommendations come from the County's departments as part of the annual budget process. County staff implemented a two-phase approach to assist in the evaluation of information technology project proposals submitted for FY2002 funding and to support the following objectives:

- minimize the rejection of projects that may be beneficial to County business conceptually, however lack substantive information in critical project areas such as staffing plans, technical architecture, project deliverables and benefits
- ensure that proposed project timeframes, areas of responsibility and funding accurately reflect County procurement, budget and existing IT project commitments, as well as to clearly identify the impact of the project on agency business and technical staff, and agency operations
- identify potential savings by utilizing exiting County-owned technologies or by jointly reviewing similar individual project requests to minimize IT software and hardware duplication and leverage technology investments already made
- ensure that proposed project schedules are feasible, and/or that ongoing projects are within scope and budget, and are on schedule

Early in the process, agencies are requested to submit both a business and technical viability analysis for each proposed project. The business analysis, reviewed by staff from the Department

of Management and Budget (DMB), includes such factors as business objectives, return on investment (including cost savings, cost avoidance, enhanced revenue, non-quantifiable service benefits, staff savings and staffing efficiencies), indicators to be used to measure success, estimated costs, business related risks and alternatives to the proposed project.

The technical analysis, reviewed by staff from the Department of Information Technology (DIT), includes such factors as proposed system architecture and its compatibility with County's Technical Architecture Standards, impact on existing systems, data conversion and electronic interface requirements, and staffing requirements for development, enhancement and maintenance of the project.

After review by DMB and DIT, recommendations and suggestions for improvement are made to the project sponsors. The projects are then resubmitted for final review by Senior DIT and DMB managers. Once reviewed, funding consideration is guided by the five information technology priorities established by the IT Senior Steering Committee.

From this interview process, a recommendation for project funding is created. The Senior IT Steering Committee and ITPAC review the recommendation, any revisions are made and the ITPAC writes a letter endorsing the proposed projects and funding to the Board of Supervisors. The Board makes the final decision on funding based on this endorsement.

Once projects are approved for funding, a steering committee is created for each project. This committee can vary in size, based on the dollar value and the strategic importance of the project. A project manager is selected from the department sponsoring the project and a technical project manager is selected from DIT and/or the user agency's technical group if one exists.

Project managers are required to hold regular meetings and report progress and issues. All projects need to follow the County's standards and project methodology as defined by the CIO. The County is now working to also establish a formal architecture standards document to provide further guidance to the project managers.

The County departments must also formally certify project managers. DIT has created a project manager certification course, which certifies project managers to lead projects at different dollar thresholds. Once certified and leading a project, the project manager's salary is adjusted to reflect the level of project responsibility and dollars that is involved. The certification focuses on project reporting and administration, contract negotiation and management, task planning and other topics. Certification is also required for technical project managers.

All of these elements:

- CIO position at the Deputy County Executive level reporting to the County Executive
- private sector and internal County board of directors for the CIO
- planning and review of technology investments county-wide
- focus on standards, training and certification

work together to create an enterprise wide process and focus for IT in Fairfax County. The process is inclusive of all departments, it ensures that there is a high level champion for IT and that as solutions are chosen they match the goals of the enterprise as a whole.

Challenges in Creating the CIO Position

The creation of the CIO position was a major change for Fairfax County. Initially five departments were merged into one to create DIT. This was a culture shock to the employees of these departments and also meant that several department heads became subordinates within a department rather than heads of independent departments.

Eventually it was also recognized that the CIO could not actually run DIT on a day-to-day basis, especially after the addition of the Library, HIPAA Compliance, Cable, Consumer Protection and Document Services to the CIO group and a new department head position was created for DIT itself.

These changes have meant time and effort in team building and the loss of some staff that could not accept change. Even today we face challenges when old cultural habits of former departments and managers threaten to de-rail initiatives. To create a new structure around existing departments takes an investment in change management and careful selection of candidates to fill key positions that will be a positive force in fostering positive group dynamics and a cooperative atmosphere.

The recognition that the CIO directly affected County policy and the way in which technology was utilized within departments and integrated across departments, also called for change management, cooperation and collaboration. The creation of the ITPAC and the Senior IT Steering Committee as boards of directors for the CIO was very helpful in this area. The ITPAC gave the CIO a direct link to the Board of Supervisors, an unbiased group from which to garner opinions and access to private sector innovations. The Senior IT Steering Committee gave the CIO a link the County's departments and their opinions, a sounding board for new initiatives and verification of their acceptance by County staff and partners to ensure that County-wide IT standards and procedures were being followed.

Being connected to the County departments and being inclusive, open-minded and collaborative when setting up groups to look at enterprise-wide systems, standards, security planning, policies and other issues, has been critical in making the CIO concept work at Fairfax County.

The addition of the Library, Cable, Consumer Protection and Document Services to the CIO's group also brought fresh ideas, innovation and direct access to customer service expertise. The latter would be very important with the advent of E-Government.

The inclusion of HIPAA Compliance further broadened the CIO's role in the management and protection of County information. The CIO now matrixes over all County Departments that are affected by the HIPAA legislation. The CIO also works closely with the County's Office of Public Affairs in the delivery of its public information role and represents the County across the Country and abroad to discuss information and technology and IT accomplishments in Fairfax County.

CONCLUSION

The restructuring of the Commonwealth's IT organization, which is proposed in Senate Bill 847 and House Bill 1926 is fundamentally modeled on the centralized structure for IT services found at Fairfax County. Fairfax County has been recognized nationally and

internationally for its IT and E-government program and the centralized IT approach along with close partnerships with business experts in County departments has been the key to our achievements. I believe from my experience as a CIO, 20 years in the IT industry and as a member of COTS since its formation under the previous administration, that centralization as described in the Bill would be a great step forward for the Commonwealth IT function.

A centralized organization such as has been proposed, would allow for standardization, strong IT governance, a common architecture and a streamlining of the overall delivery of IT. This would not only benefit state agencies, but would be of benefit to local government, which interfaces directly in many instances with State IT systems to deliver services to the public. A single IT point of contact, set of standards, architecture and overall IT direction would greatly benefit this relationship and service delivery.